Idaho

Biobased Fuels, Power, and Products State Fact Sheet

Growing a Cleaner, Stronger Economy in Idaho

Biomass has supplied approximately 9% of the total energy used in Idaho in recent years and there is enough biomass waste (forest and logging residue, municipal solid waste, agricultural residues, animal waste, agricultural processing residue) to supply all the energy Idaho uses. Idaho has an estimated installed biomass capacity of 118 MW. There is an opportunity to increase that number through the use of anaerobic digesters, since Idaho is ranked fifth in the nation in terms of its dairy industry. The Livestock Industry Anaerobic Digestion Initiative in the state of Idaho has focused on the design and feasibility of an anaerobic digestion installation at a dairy in the Magic Valley. Largely in conjunction with the effort to install digesters in dairies, the Idaho Energy Division has taken a leadership role towards pushing to reduce renewable energy power sales barriers with Idaho electric utilities. Energy Division staff are working closely with County Commissioners, state legislators, dairymen and other interest groups to allow reasonable access to the power grid.

The U.S. Department of Energy Biomass Program has actively supported biodiesel activities with the University of Idaho. Currently, this cooperation includes an Albertsons Waste Oil Project which tested the durability of a Kubota 4 cylinder engine run on a blend of 10% used fryer oil from the Albertson's grocery chain and 90% diesel. In the past, demonstration projects have included a Kenworth semi tractor-trailer which was fueled on a 50% blend with Hysee (hydrogenated soybean ethyl ester). The semi ran successfully for over 200,000 miles on this unique blend. This is a recent development in a successful biofuels program in Idaho, which has been developing and utilizing biofuels since the 1930s. Recently, in an effort to expand the use of alternative fuels in Idaho and bring cleaner air to the Treasure Valley, the Idaho Energy Division launched a program designed to provide biodiesel to several area

Biobased Fuels, Power, and Products in Idaho

Bio-Industry	Sales ($1,000)	Employees	Capacity	Number of Facilities
Power	N/A	900	118 MW	4
Fuels	37,200	400	6 Mgy	1
Products	570	7	--	3

N/A - no information available

-- Comparative capacity data not available among products

Federal R&D Partners

Amalgamated Research Inc.
(Twin Falls)

Argonne National Laboratory
(Idaho Falls)

Boise Cascade Corporation
(Boise)

Idaho Dept. of Water Resources,
Energy Division
(Boise)

Idaho National Engineering and Environmental Laboratory
(Idaho Falls)

University of Idaho
(Moscow)

Biomass Resources

Corn:	175,000 acres planted 6,750,000 bushels produced
Wheat:	1,280,000 acres planted 85,150,000 bushels produced
CRP:	734,341 acres enrolled
MSW:	1,086,000 tons generated
Forest Land:	22,293,000 acres
Livestock:	2,012,000 head
Poultry:	887,000 head

transportation fleets for the price of standard diesel. These fleets included the Meridian School District, Treasure Valley Transit, Sanitary Services Company and the General Services Administration.

Yellowstone Park in Idaho was the first testing site for biodiesel in the National Parks. A truck powered with 100% biodiesel was tested successfully under the severe temperatures and high elevation at Yellowstone. This success led to the conversion of the entire fleet of trucks to a B20 blend; its snowmobile fleet was converted to run off an E10 blend.

Idaho also offers low interest loans from $1,000 to $100,000 for active biomass projects.

Federally Funded Biomass RD&D in Idaho

Select a project title for details

U.S. Department of Energy

- Industrial Membrane Filtration and Short- Bed Fractal Separations for Biobased Products
- Gasification of Solid Wood Wastes for Use to Co-Fire an Existing Stoker Boiler
- Field Mobile NIR for Standing Wood
- Advanced Electrodeionization Technology for Product Purification, Waste Recovery and Waste Recycling
- Tree Genetic Transformation Coop
- High Value Products From Wheat
- Industrial Membrane Filtration
- Harvesting Technology Plus
- Chemicals from Ligno Cellulose
- CFD-Modeling, Shape Optimization and Feasibility Testing of Advanced BL Nozzel Designs for Improved Energy Efficiency
- Renewable Diesel
- GREET Fuel Cycle Analysis
- Methane De-Nox Reburning Process
- Advanced Membrane Technology for Biosolvents

U.S. Department of Agriculture

- Engineering Opportunities to Enhance Agricultural Profitability
- Application of Coupled Abiotic/Biotic Processes for the Remediation of Contaminated Soils
- Developing More Effective Weed Management Systems for Sugarbeet

Data sources and the data collection methodology for the "Biobased Fuels, Power, and Products State Profiles" are available at http://www.bioproducts-bioenergy.gov/.

For additional information on RD&D Projects, please click on the project title.

For additional information on state activities, please contact:

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